What is claimed is:

1   1.   A method comprising:

receiving a video data stream comprising a plurality of portions;

performing a scaling operation on the video data stream to produce a plurality of scaled portions wherein the scaling operation comprises a scaling ratio; and

varying a density of scaled portions stored in the memory wherein the density is related to the scaling ratio.

2.   The method of claim 1, further comprising:

accessing a scaled portion from the memory;

retrieving a data sample from the scaled portion; and

using the data sample in a second scaling operation.

3.   The method of claim 1, further comprising:

dividing the memory into a plurality of lines;

identifying a line; and

storing a number of scaled portions in the line wherein the number is related to the scaled ratio.

4.   A system comprising:

a memory comprising a number of bytes;

a scaler for performing a scaling operation, the scaling operation identifiable by a scaling ratio, wherein the scaler receives a data stream comprising a plurality of portions and produces a plurality of scaled portions; and

a memory controller coupled to the memory for storing an amount of scaled portions in the memory, wherein the amount corresponds to the scaling ratio.

1   5.   The system of claim 4, wherein the data stream is a video data
2   stream.

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2   6.   The system of claim 5, wherein the video data stream comprises a
3   plurality of frames and each frame comprises a predetermined number of bytes.

1   7.   The system of claim 6, wherein the number of bytes in the memory
2   is smaller than the predetermined number of bytes.

1   8.   The system of claim 4, wherein the scaling operation is a horizontal
2   scaling operation.

1   9.   The system of claim 4, further comprising:
2   a second scaler for performing a second scaling operation,
3   identifiable by a second scaling ratio.

1   10.   The system of claim 9, wherein the second scaling ratio is identical
2   to the first scaling ratio.

1   11.   The system of claim 9, wherein the second scaling operation is a
2   vertical scaling operation.

1   12.   The system of claim 9, further comprising:
2   a scaling control unit coupled to the second scaler, wherein the
3   second scaler further comprises a finite impulse response filter including a

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4   plurality of coefficients and the scaling control unit changes the amount of
5   coefficients in the filter in relation to the scaling ratio.

1   13.   The system of claim 12, wherein the scaling control unit further
2   comprises a look-up table including coefficient values for changing the amount of
3   coefficients.

1   14.   The system of claim 4, further comprising a first-in-first-out
2   memory.

1   15.   The system of claim 4, wherein the memory is an on-chip memory.

1   16.   An article comprising a medium storing instructions that enable a
2   processor-based system to:
3   receive a video data stream comprising a plurality of portions;
4   perform a scaling operation on the video data stream to produce a
5   scaled video data stream, wherein the scaling operation comprises a scaling
6   ratio; and
7   vary a density of the scaled video data stream stored in the
8   memory wherein the density is related to the scaling ratio.

1   17.   The article of claim 16, further storing instructions that enable a
2   processor-based system to:
3   access a scaled portion from the memory;
4   retrieve a data sample from the scaled portion; and

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5   use the data sample in a second scaling operation.

18.   The article of claim 16, further storing instructions that enable a
2   processor-based system to:
3   divide the memory into a plurality of lines;
4   identify a line of the plurality of lines; and
5   store a number of scaled portions in the line wherein the number is
6   related to the scaling ratio.